REMARKS

The acknowledgement, in the Office Action, of a claim for foreign priority under 35 U.S.C. § 119(a)-(d), and that the certified copy of the priority document has been received, is noted with appreciation.

Claims 1-14 are pending in the application; the status of the claims is as follows:

Claims 1, 2, 7, and 8 are rejected under 35 U.S.C. § 102(b) as being anticipated by U.S. Patent No. 5,043,816 to Nakano et al ("Nakano").

Claims 3-6 and 9-14 are rejected under 35 U.S.C. § 103(a) as being unpatentable over Nakano in view of U.S. Patent No. 5,223,935 to Tsuji et al ("Tsuji").

To date, no Notice of Draftsperson's Patent Drawing Review has been received. Applicant respectfully requests receipt of this document when it becomes available. Please note that the original drawings filed in the patent application are "formal" drawings.

35 U.S.C. § 102(b) Rejection

"A claim is anticipated only if each and every element as set forth in the claim is found, either expressly or inherently described, in a single prior art reference." *Verdegaal Bros. v. Union Oil Co. of California*, 814 F.2d 628, 631, 2 USPQ2d 1051, 1053 (Fed. Cir. 1987). . . . "The identical invention must be shown in as complete detail as is contained in the ... claim." *Richardson v. Suzuki Motor Co.*, 868 F.2d 1226, 1236, 9 USPQ2d 1913, 1920 (Fed. Cir. 1989). The elements must be arranged as required by the claim, but this is not an *ipsissimis verbis* test, i.e., identity of terminology is not required. *In re Bond*, 910 F.2d 831, 15 USPQ2d 1566 (Fed. Cir. 1990). Note that, in some circumstances, it is permissible to use multiple references in a 35 U.S.C. 102 rejection. See MPEP § 2131.01.

The rejection of claims 1, 2, 7, and 8 under 35 U.S.C. § 102(b) as being anticipated by Nakano is respectfully traversed, because Nakano fails to disclose each and every

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element set forth in the claims, in as complete detail as contained in the claims, and arranged as required by the claims. For instance, claim 1 recites

> ". . . a resolution reducer for reducing image data of a frame sensed by said image sensing unit;
> a detector for detecting a degree of correlation between reduced image data of a plurality of frames from said image sensing unit before shooting;
> an exposure controller for, in a case where the degree of correlation is low as a result of the detection by said detector, controlling an exposure time of said image sensing unit so as to be shorter than an exposure time in a case where the degree of correlation is high . . . ."

Thus, claim 1 requires that the exposure controller controls the exposure in response to the degree of correlation between frames of reduced image data.

It is respectfully submitted that Nakano fails to disclose a camera in which the exposure is controlled based on a degree of correlation between frames of reduced image data. Rather, Nakano discloses a camera in which a "judging circuit 20 judges whether or not the blurring phenomenon occurs," and if it does "a buzzer BZ (not shown in detail) is energized for a predetermined time period by the judging circuit 20, which will give warning to the photographer" (Column 17, lines 59-66). Nakano goes on to state that when the buzzer sounds, the photographer is alerted to take another picture (column 17, lines 67-68), or to review the pictures already taken and only save the pictures that are not blurry or that have the least amount of blur (column 18, lines 1-11). There is no disclosure whatsoever that the camera automatically controls the exposure when there might be blurring so as to minimize the amount of blurring.

Even the automatic exposure bracketing disclosed by Nakano (column 19, line 66 to column 20, line 21) does not disclose adjusting the exposure *based on the degree of correlation* between frames of reduced image data. Rather, Nakano discloses a camera in which focus and exposure setting are determined in a conventional manner when the shutter button is half-pressed (column 19, lines 42-65). When the shutter button is fully pressed, an image is captured *at the determined exposure settings*, and then the aperture

and shutter speed are varied to provide automatic exposure bracketing. Specifically, the aperture and shutter speed are varied by plus and minus one step so that a total of nine combinations of aperture and shutter speed are used to take nine successive pictures (column 19, line 66 to column 20, line 22). A photographer may then review the nine pictures, and select and save the picture having the best image quality (column 20, lines 35-58). Thus, a camera according to Nakano captures nine images at various exposure settings and lets a photographer choose the best image.

This is in stark contrast to a camera according to claim 1. A camera according to claim 1 determines a degree of correlation between multiple frames of reduced image data, selects exposure parameters in response to the degree of correlation, and then captures an image based on the selected exposure parameters. Clearly, the claimed camera is different than the camera disclosed by Nakano. Accordingly, it is respectfully requested that the rejection of claim 1 as being anticipated by Nakano et al, US 5,043,816, be reconsidered and withdrawn.

Claims 2 and 7 depend from claim 1. Accordingly, these claims are allowable over Nakano for at least the same reasons as provided above in respect of claim 1. The rejection of claims 2 and 7 as being anticipated by Nakano should be withdrawn.

With regard to claim 8, it is respectfully submitted that Nakano fails to disclose the claimed exposure control method. Claim 8 recites:

> ". . . reducing image data of a frame sensed by said image sensing unit;
> detecting a degree of correlation between reduced image data of a plurality of frames from said image sensing unit before shooting;
> in a case where the degree of correlation is low as a result of the detection, controlling an exposure time of said image sensing unit so as to be shorter than an exposure time in a case where the degree of correlation is high; . . ."

Therefore, claim 8 requires that the exposure time be selected based on the degree of correlation. Nakano fails to disclose such a method of selecting exposure times. Accordingly, it is respectfully requested that the rejection of claim 8 as being anticipated by Nakano et al, US 5,043,816, be reconsidered and withdrawn.

35 U.S.C. § 103(a) Rejection

To establish a *prima facie* case of obviousness, three basic criteria must be met. First, there must be some suggestion or motivation, either in the references themselves or in the knowledge generally available to one of ordinary skill in the art, to modify the reference or to combine reference teachings. Second, there must be a reasonable expectation of success. Finally, the prior art reference (or references when combined) must teach or suggest all the claim limitations. The teaching or suggestion to make the claimed combination and the reasonable expectation of success must both be found in the prior art, not in applicant's disclosure. *In re Vaeck*, 947 F.2d 488, 20 USPQ2d 1438 (Fed. Cir. 1991). MPEP 2143.

The rejection of claims 3-6 and 9-14 under 35 U.S.C. § 103(a), as being unpatentable over Nakano in view of Tsuji, is respectfully traversed because the references fail to teach or suggest all the claim limitations.

With respect to claims 3-6, it is respectfully submitted that these claims depend from claim 1 which distinguishes Nakano for the reasons provided hereinabove. It is further submitted that Tsuji fails to supply the teachings that are missing from Nakano. Specifically, Tsuji fails to teach a camera in which exposure parameters are determined based on a degree of correlation between reduced image data of a plurality of frames. Accordingly, claims 3-6 are not obvious over the combination of Nakano and Tsuji, and the rejection should be withdrawn.

Furthermore, claim 3 requires a camera that determines a correlation between reduced image data of two frames by computing pixel differences between reduced image data of two frames, compares the difference with a threshold level, and determines the number of pixel differences that fall on the same side of the threshold, e.g., the number

above the threshold or the number below the threshold. This is evident from the claim language, which states that the correlation detector "detects the degree of correlation according to the *number of the pixels* for which the same comparison result is obtained," e.g., the number of pixels for which the pixel difference exceeds a predetermined threshold value, or equivalently, the number of pixels in which the pixel difference is below the threshold.

It is respectfully submitted that neither Nakano nor Tsuji disclose calculating pixel differences, comparing the pixel differences with a threshold level, or determining the number of pixels that fall on the same side of the threshold. The cited portion of Tsuji teaches a method of determining an illumination level for an image. Specifically, the luminance (Y) levels from pixels within a "designated photometric area" are converted to digital values and summed to provide signal T0. Signal T0 is then used by the exposure control section to select an exposure condition corresponding to whether the incident light is standard, large, or small. It is respectfully submitted that signal TO is not the number of pixels for which a pixel difference exceed a threshold level. Accordingly, the proposed combination of Nakano and Tsuji fails to teach all the limitation of claim 3, and fails to render claim 3 obvious.

With respect to claim 4, it is respectfully submitted that neither Nakano nor Tsuji teach counting the number of pixels wherein a pixel difference exceeds (or fails to exceed) a predetermined threshold value. It is submitted that signal T0 taught by Tsuji is not a number of pixels, but rather the sum of the luminance signal from a predetermined set of pixels. Accordingly, Tsuji's 'N' (eqs. (1) to (6)) is **not** a "ratio between the number of the pixels [exceeding the threshold] and a predetermined number of pixels." Accordingly, it is respectfully submitted that the combination of Nakano and Tsuji fail to render claim 4 obvious.

Claim 5 recites a detector that "detects the degree of correlation according to the sum of the pixels for which the pixel level difference is not less than the predetermined

threshold value." Because neither reference teaches a detector that determines a comparator that determines pixel differences and compares the pixel differences to a threshold value, neither reference can teach basing the degree of correlation on the sum of the pixels for which the pixel difference exceeds the threshold value. Accordingly, claim 5 is not obvious in view of the combination of Nakano and Tsuji.

With respect to claim 6, it is respectfully submitted that neither Nakano nor Tsuji teach summing the number of pixels wherein a pixel difference exceeds (or fails to exceed) a predetermined threshold value. Accordingly, the references cannot teach determining a "ratio between the sum of the pixels [exceeding the threshold] and a predetermined number of pixels." Accordingly, it is respectfully submitted that the combination of Nakano and Tsuji fail to render claim 6 obvious.

In regards to claim 9, it is respectfully submitted that neither Nakano nor Tsuji, teach or suggest a camera in which an exposure program is selected based on a degree of correlation between a plurality of frames of image data. As discussed above, Nakano teaches to provide an alarm when there is insufficient correlation between two frames of image data, but does not teach to automatically select an exposure program, and Tsuji merely teaches to select an exposure program based on the amount of incident light, thereby adding nothing to Nakano. Accordingly, the rejection of claim 9 as being obvious in view of the combination of Nakano and Tsuji should be reconsidered and withdrawn.

Claim 11 is directed to an exposure control method for a camera that has multiple exposure control programs for calculating exposure settings based on various factors. For example, a first program might determine appropriate exposure settings for taking a picture of a landscape, whereas a second program may determine appropriate exposure settings for a sporting event. A typical camera provides a dial or other control enabling a photographer to select a program. Claim 11 recites a method for automatically selecting an exposure program. For instance, claim 11 recites "detecting a degree of correlation between image data of a plurality of frames . . ." and "selecting the second program in the

case where the degree of correlation is lower than a predetermined level." Neither Nakano nor Tsuji teach or suggest an exposure control method wherein a previously stored exposure control program is selected based on a degree of correlation between a plurality of frames of image data. Claim 12 is an apparatus claim corresponding to the method of claim 11. Accordingly, it is respectfully requested that the rejection of claims 11 and 12 as being unpatentable over Nakano in view of Tsuji be reconsidered and withdrawn.

Claim 13 depends from claim 12 with the added feature that the first exposure control program is selected whenever the brightness of the subject is below a predetermined value. It is respectfully submitted that claim 13 is allowable over the art of record for the same reasons as applied to claim 12. Moreover, neither Nakano nor Tsuji teach a digital camera wherein a second exposure control program is selected responsive to a degree of correlation between multiple images unless the light level is low, in which case the first program is selected. Accordingly, claim 13 distinguishes the cited references and is allowable thereover.

Claim 14 is analogous to claim 11, except that in claim 14 the first program and second program determine an aperture value instead of an exposure time as in claim 11. Because none of the art of record teaches or suggests selecting *any* kind of exposure program based on a degree of correlation between image frames, they also fail to teach or suggest selecting a program to determine an aperture value. Accordingly, it is respectfully requested that the rejection of claim 14 as being unpatentable over Nakano in view of Tsuji be reconsidered and withdrawn.

CONCLUSION

Wherefore, in view of the foregoing amendments and remarks, this application, including claims 1-14, is considered to be in condition for allowance, and an early reconsideration and a Notice of Allowance are earnestly solicited.
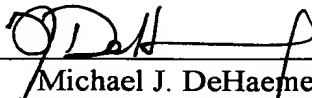
This Amendment does not increase the number of independent claims, does not increase the total number of claims, and does not present any multiple dependency claims. Accordingly, no fee based on the number or type of claims is currently due. However, if a fee, other than the issue fee, is due, please charge this fee to Sidley Austin Brown & Wood LLP's Deposit Account No. 18-1260.

Any fee required by this document other than the issue fee, and not submitted herewith should be charged to Sidley Austin Brown & Wood LLP's Deposit Account No. 18-1260. Any refund should be credited to the same account.

If an extension of time is required to enable this document to be timely filed and there is no separate Petition for Extension of Time filed herewith, this document is to be construed as also constituting a Petition for Extension of Time Under 37 C.F.R. § 1.136(a) for a period of time sufficient to enable this document to be timely filed.

Any other fee required for such Petition for Extension of Time and any other fee required by this document pursuant to 37 C.F.R. §§ 1.16 and 1.17, other than the issue fee, and not submitted herewith should be charged to Sidley Austin Brown & Wood LLP's Deposit Account No. 18-1260. Any refund should be credited to the same account.

Respectfully submitted,

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July 12, 2004

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